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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,593	02/18/2004	Floyd Backes	160-056	3377
34845	7590	03/08/2006	EXAMINER	
STEUBING MCGUINNESS & MANARAS LLP			PHILPOTT, JUSTIN M	
125 NAGOG PARK			ART UNIT	
ACTON, MA 01720			PAPER NUMBER	
			2665	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,593

Applicant(s)

BACKES, FLOYD

Examiner

Justin M. Philpott

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed November 2, 2005 have been fully considered but they are not persuasive.

3. First, applicant attempts to distinguish applicant's invention from the cited prior art by disclosing that applicant's invention such as claimed in claims 1 and 5 solves problems of prior art, e.g., by facilitating power adjustment at a station in order to re-associate with an access point that can communicate with a station at a lower transmit power (see Remarks, page 5, lines 15-21). However, Applicant's claims, and specifically claims 1 and 5, fail to disclose or refer to any "power adjustment" or re-associating at a "lower transmit power". In fact, nowhere in applicant's claims is the word "power" or similar phrasing recited. Accordingly, applicant's argument not being pertinent to the claims in the instant application, this argument is not considered to be persuasive.

Art Unit: 2665

4. Second, applicant argues (pages 6-7) that the prior art of Vlcek and Karaoguz do not disclose the newly added limitations recited in applicant's amended claims. However, as discussed in the following office action, the newly cited prior art of Lee teaches the newly added limitations recited in applicant's amended claims. Thus, applicant's argument is moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, independent claim 1 includes newly added limitations such as performing steps "at each of the plurality of access points within communication range of stations", collecting bid messages "not currently associated with that access point", wherein each bid message is "indicative of a request to associate", and "selecting at least one of the bid messages based at least in part on the parameter related to the distance". Independent claim 5 also recites similar language. Additionally, new claims 6 and 7 recite limitations of selecting a bid message based "at least in part on an indication of data rate provided by the access point with which the

Art Unit: 2665

station is currently associated”, and “selecting the bid from the station having the lowest data rate”, respectively. Finally, dependent claims 2-4 depend upon claim 1, and therefore, for the same reason discussed above regarding claim 1, claims 2-4 accordingly also fail to comply with the written description requirement.

With respect to each of these new limitations, applicant asserts that “[s]upport for the claim amendments and the new claims is in the Specification at pages 12-13” (Remarks, page 5, lines 4-5). However, Examiner has reviewed pages 12-13 of applicant’s originally filed specification and is unable to find support for these new limitations. Accordingly, contrary to applicant’s assertion, the above claim amendments fail to comply with the written description requirement. If applicant continues to assert support is provided in applicant’s originally filed specification, applicant is respectfully requested to provide page and line numbers where support for such claim limitations exist.

Claim Objections

7. Claim 1 is objected to because of the following informalities: the phrase “that access point” (line 6) is unclear. That is, it is unclear which access point is “that access point”.

Appropriate clarification and/or correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2665

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication No. US 2004/0054767 A1 by Karaoguz et al. in view of U.S.

Patent Application Publication No. US 2005/0117524 A1 by Lee et al.

Regarding claim 1, Karaoguz teaches a method for use in an access point (e.g., access points 410a-n, see FIG. 4) in a wireless communications environment including multiple access points (e.g., access points 410a-n in FIG. 4) and stations (e.g., wireless devices 415a-n), wherein stations gain network access by associating with one or more of the access points (e.g., see paragraph 0021), comprising: at each of a plurality of access points (e.g., access points 410a-n in FIG. 4) within communication range of stations (e.g., wireless devices 415a-n), repeatedly executing the steps of collecting bid messages (e.g., see paragraphs 0029-0036 regarding access points gathering location and identity information of the wireless devices and transmitting range messages to the stations), each bid message (e.g., comprising location and identity information) including a parameter related to the distance between the access point and the station (e.g., see paragraph 0033 regarding range message comprising location information indicating the distance range; see also paragraph 0041-0042 regarding location information); and sending an accept message (e.g., range message acknowledgement) from which a bid message was received, the accept message for causing the station to associate with the access point (e.g., see paragraphs 0033-0036 wherein the wireless device further establishes communication with the access point). However, Karaoguz teaches the *station* (not the access point) comprises the functional elements for causing the access point-to-station association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the

Art Unit: 2665

access point). Furthermore, Karaoguz may not specifically disclose the bid messages are from stations not currently associated with the access point.

While Karaoguz teaches the station comprises the functional elements for causing the association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the access point), it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to shift the location of association elements from the station to the access point (i.e., wherein bid messages would be sent from the station and accept messages from the access point) since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950). However, Karaoguz may not specifically disclose the bid messages are from stations not currently associated with the access point.

Lee, like Karaoguz, also teaches a method for use in an access point in a wireless communications environment (e.g., see abstract), and further, specifically teaches an access point comprises the functional elements for causing the access point-to-station association (e.g., see FIG. 6 and paragraphs 0064-0067 regarding functions performed by access point AP). Still further, Lee teaches bid messages are received from stations not currently associated with the access point (e.g., STA sends a reassociation request message to AP_B while most recently being associated with AP_A, see FIG. 5 and paragraphs 0058-0062). Additionally, the bid messages in Lee are indicative of a request to associate (e.g., see FIG. 5 regarding reassociation

Art Unit: 2665

requests), and selecting at least one of the bid messages (e.g., requests) is based at least in part on a parameter relating to distance (e.g., see paragraph 0044 regarding “distance between APs should be considered”). Finally, the teachings of Lee provide both a secure quality of service and a high-speed roaming service for IEEE 802.11 communications (e.g., see paragraphs 0068-0069). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the IEEE 802.11 communications teachings of Lee to the IEEE 802.11 communications method of Karaoguz (e.g., see Karaoguz, paragraph 0016 regarding IEEE 802.11) in order to provide station/access-point communications with a secure quality of service and a high-speed roaming (e.g., see paragraphs 0068-0069).

Regarding claim 3, while Karaoguz may not specifically disclose sending an accept message only if a maximum number of associations has not been exceeded, Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045), wherein it is implicit that the number of permissible associations in the network cannot be exceeded. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to send an accept message only if a maximum number of associations has not been exceeded, since Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045) and it is implicit that the number of permissible associations in the network cannot be exceeded. Furthermore, claim 3 was rejected in the previous office action by the Examiner taking official notice that the limitations recited in this claim is well known in the art. In Applicant’s response to the previous office action, Applicant has not traversed the Examiner’s assertion of official notice or Applicant’s traverse is not adequate. Therefore, in accordance with

Art Unit: 2665

MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art.

Regarding claim 4, Karaoguz teaches maintaining a table including an entry for each station from which a bid message (e.g., range message) has been received, each entry including the parameter (e.g., see paragraph 0043 regarding storage of location information within central server).

Regarding claim 5, Karaoguz teaches the method discussed above regarding claim 1 and further, teaches maintaining a table including an entry for each station from which a bid message has been received, each entry including the parameter (e.g., see paragraph 0043 regarding storage of location information within central server). Further, while Karaoguz may not specifically disclose the accept message is sent to the device having the parameter indicating the closest distance, Karaoguz teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045), wherein it is implicit that the closest device is selected for association in order for the system to operate efficiently. Thus, at the time of the invention it would have been obvious for the accept message in Karaoguz to be sent to the device having the parameter indicating the closest distance, since Karaoguz teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045) and it is implicit that the closest device is selected for association in order for the system to operate efficiently. Furthermore, claim 5 was rejected in the previous office action by the Examiner taking official notice that the limitations recited in this claim is well known in the art. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is

not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz in view of Lee, further in view of U.S. Patent No. 6,266,537 to Kashitani et al.

Regarding claim 2, Karaoguz in view of Lee teaches the method discussed above regarding claim 1, however, may not specifically disclose an accept message is sent to the station whose bid message includes the parameter indicating the closest distance.

Kashitani also teaches a method for associating stations and access points, and specifically discloses associating occurs when the parameter received indicates the closest distance (e.g., see col. 7, lines 23-32 – col. 8, line 58 regarding polling response signals responding to long-distance ranges or short-distance ranges). The teachings of Kashitani provides reduced interference and increased reliability for wireless transmissions (e.g., see col. 3, line 47 – col. 4, line 26). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Kashitani to the method of Karaoguz in view of Lee in order to provide reduced interference and increased reliability for wireless transmissions.

11. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz in view of Lee, further in view of U.S. Patent Application Publication No. US 2004/0121749 A1 by Cui et al.

Regarding claims 6 and 7, Karaoguz in view of Lee teach the method discussed above regarding claim 1, however, may not specifically disclose selecting stations' bid messages is

Art Unit: 2665

based at least in part on an indication of data rate to the station by the access point with which the station is currently associated, or selecting the lowest data rate.

Cui, like Karaoguz and Lee, also teaches wireless communications between stations (e.g., clients 102) and an access point (e.g., host 100), and further, specifically teaches the access point selects the station at least in part on an indication of data rate to the station by the access point with which the station is currently associated (e.g., see paragraph 0049), and also selecting the lowest data rate (e.g., see paragraph 0009 regarding allowing access by stations 316, 318, 320 and 322 having the lowest data rates of 1Mbps; and see Table 1 and paragraph 0034 regarding allocating a specific channel for stations communicating at the lowest data rate of 1Mbps).

Additionally, the teachings of Cui provide improved system throughput (e.g., see paragraphs 0010-0014). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the wireless communication teachings of Cui to the wireless communication method of Karaoguz in view of Lee in order to provide improved system throughput (e.g., see paragraphs 0010-0014).

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

13. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 2665

14. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/781,525. Although the conflicting claims are not identical, they are not patentably distinct from each other because each recites logic performing identical functions. Specifically, Application No. 10,781,525 comprises claims which are broader versions of the instant application such that all of the limitations from independent claim 1 of Application No. 10,781,525 are included in independent claim 1 of the instant application. In particular, at the time of the invention it would have been obvious to one of ordinary skill in the art to collect bid messages from stations which may or may not be currently associated with an access point, instead of being limited to collecting bid messages from stations currently associated with the access point, in order to provide a system with enhanced operation for accommodating a greater number of access point communications.

16. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

Art Unit: 2665

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin M Philpott


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